

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

Γ	APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
	09/521,827	03/09/2000	Tony M. Brewer	10992150-1	2277
	22879	22879 7590 06/24/2004		EXAMINER	
	HEWLETT PACKARD COMPANY	KIANERSI, MITRA			
		2400, 3404 E. HARMONY		ART UNIT	PAPER NUMBER
				ART ONT	TAI ER NOMBER
	FORT COLLINS, CO 80527-2400			2143	G
				DATE MAILED: 06/24/2004	. !

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	09/521,827	BREWER ET AL.				
Office Action Summary	Examiner	Art Unit				
	mitra kianersi	2143				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on 02 April 2004.						
2a) This action is <b>FINAL</b> . 2b) ⊠ This	s action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
<ul> <li>4)  Claim(s) 1-24 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdrawn from consideration.</li> <li>5)  Claim(s) is/are allowed.</li> <li>6)  Claim(s) 1-24 is/are rejected.</li> <li>7)  Claim(s) is/are objected to.</li> <li>8)  Claim(s) are subject to restriction and/or election requirement.</li> </ul>						
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>31 October 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date  5) Notice of Informal Patent Application (PTO-152)  Cother:						

Art Unit: 2143

## **Drawings**

The drawings were received on Oct/21/2003. These drawings are approved.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-24 are rejected under 35 U.S.C. 102(e) as being anticipated by W.David Shambroom (U.S. Patent number 5,923,756).

1. Regarding independent claim 1, Shambroom teaches a method for executing a transaction in a network having a source site and a destination site, the method comprising the steps of (from a client computer to a destination, abstract, lines1-3)

transmitting an initial transaction request message from source site to destination site;

receiving transaction request message at destination site; (corresponds to a secure connection for receiving and transmitting data is established, abstract, lines 3-5)

generating a data entry related to the progress of data operative transaction in a destination database; (corresponds to generation of additional information which will be used to encrypt future transmissions between client 200 and network server 300. col 7, lines 28-30) and

Application/Control Number: 09/521,827

Art Unit: 2143

preserving association of data entry with transaction in destination database so long as transaction is active in network (corresponds to the shell program creating records on the network server that maintain a record of the user's identity and use (i.e. time and date). As long as the user is logged on, the shell logon program exists. (The shell program creates records on the network server that maintain a record of the user's identity and use (i.e. time and date). As long as the user is logged on, the shell logon program exists. Col 4, lines 6-9)

- 2. Regarding claim 2, Shambroom teaches a method comprising the further step of: executing transaction at destination site, thereby producing transaction results (a network server configured as a World Wide Web server creates and executes transient processes (such as when an HTTP Common Gateway Interface (CGI) request is executed) to query the key distribution center. These temporary processes must assume in some sense the identity of the user for the length of the transaction. col 4, lines 13-17).
- 3. Regarding claim 3, Shambroom teaches a method, where a prospective operation will override transaction results in a memory board (the client user key is a one-way hash of client 200's password and other information, so the network server is able to derive the user key by hashing client 200's password. Both the permission indicator and the KDC session key are stored in credentials cache 320. Web server 305 encodes the contents of the credentials cache 320 and, as indicated at arrow 357, sends the contents of the credentials cache 320 to web browser 205. col 8, lines 46-54) and (credentials cache 830, 5 message is received at destination site (temporarily stored in the credentials cache, col 8, lines 19-30).
- 4. Regarding claim 4, Shambroom teaches a method of transmitting transaction results to source site over network (col 8, lines 42-44).
- 5. Regarding claim 5, Shambroom teaches a method of transmitting another transaction request message if no response is received from destination site at source

Application/Control Number: 09/521,827

Art Unit: 2143

site within a source site time-out period (The security of the system, however, may be enhanced further by implementing an authentication protocol that incorporates the use of timestamps. Timestamps can be used to restrict replay attacks, or the recording of some portion of an authentication protocol sequence and use of old messages at a later date to compromise the authentication protocol. col 8, lines 7-12) and (col 9, lines 27-28).

- 6. Regarding claim 6, Shambroom teaches a method deleting initial transaction request message from the network if transaction request message does not reach destination site within a request message time-out period, wherein source site time-out period exceeds request message time-out period to prevent having two transaction request messages simultaneously in transmission through network (the permission indicator, in the preferred embodiment, would contain a date/time stamp and would become worthless after a specified period of time, usually relatively short, has elapsed, col 8, lines 64-67) and (If the time stamp is within the validity period, the KDC 400 generates an access indicator. The access indicator typically would include the Kerberos user principal name, a validity period, and a server session key for use between network server 300 and destination server 500, all of which has been encrypted with the private key of the destination server 500. KDC 400 then sends to network server 300 the encrypted access indicator, and a copy of the server session key encrypted using the KDC session key, as indicated at arrow 362. col 9, lines 27-36).
- 7. Regarding claim 7, Shambroom teaches a method where upon receiving a duplicate transaction request message, identifying the data entry in the destination database established for transaction, acquiring transaction results; and retransmitting acquired transaction results to source site (Upon receiving a username and password from the user, a host computer compares the password to a list of authorized usernames in an access control file, and if the password matches the

4

Art Unit: 2143

password associated with that username, the host computer allows access. col 1, lines 61-66).

- 8. Regarding claim 8, Shambroom teaches a method, wherein acquiring comprises retrieving transaction results from destination database (In a networked system comprising multiple interconnected computers, a first computer may request service from a second or destination server through an intermediate server. This first computer is typically called a client. In order to receive service from a destination server, the client must begin by authenticating itself to the destination server. However, because the client may be communicating to the destination server over an insecure line, the client cannot simply send a password in the clear. Instead, the client and the destination server may engage in a multiple query and response exchange, constituting an authentication process, which will convince the destination server that the requesting client is an authorized user. col 2, lines 6-18).
- 9. Regarding claim 9, Shambroom teaches a method acquiring comprises: executing transaction in response to duplicate transaction request message, thereby producing transaction results (The client-authenticating information is transmitted from the network server to the client and erased from the network server. The client-identifying information is transmitted back to the network server from the client along with a message for the destination server. Permission is obtained to access the destination server from the key distribution center over the insecure network using the secure authentication protocol. At the destination server, the authority of said client to access said destination server is validated using the message. The destination server is accessed with the message if the client's authority is properly validated. col 5, lines 17-24) and (col 14, part 12-b).
- 10. Regarding claim 10, Shambroom teaches a method of receiving transmitted transaction results at source site; and transmitting, from source site to destination site, a release request to delete data entry associated with transaction in destination

Application/Control Number: 09/521,827

**Art Unit: 2143** 

database (Web server 305 encodes the contents of the credentials cache 320 and, as indicated at arrow 357, sends the contents of the credentials cache 320 to web browser 205. The authenticating information that may have resided in the network server 300 is then erased or otherwise deleted. Thereafter, in order for client 200 to continue with the transaction, client 200 will have to refresh the memory of server 300. col 8, lines 51-58).

- 11. Regarding claim 11, Shambroom teaches a method of receiving at destination site, release request to delete data entry associated with transaction; and deleting, within destination database, data entry associated with transaction, thereby liberating space in destination database. (The web server 720 encrypts the encoded credentials cache and sends the data to the web browser 620, as well as a command form. Once the network server 700 sends the data to the client 600, all transient processes which handled the data exit and terminate and consequently, all authenticating information about client 600 is erased or removed. In order for client 600 to continue with the transaction, client 600 will have to refresh the memory of the server 720 and continue the second phase of the authentication process. col 11, lines 26-35).
- 12. Regarding claim 12, Shambroom teaches a method of transmitting, from destination site to source site, a release response message, thereby indicating that data entry associated with transaction in destination database has been deleted (col 15, part 16-c).
- 13. Regarding claim 13, Shambroom teaches a method wherein the source site includes a processor and an agent device, delegating step of transmitting initial transaction request message to agent device. client workstations may be any one of a number of different hardware devices, such as PCs or Macintosh, running a variety of different operating systems, such as UNIX or DOS, and there is no single medium supported by all the varieties of clients. In summary, use of a certificate authentication scheme between the client and the network server would be administratively

Application/Control Number: 09/521,827

Art Unit: 2143

difficult to support. (col 3, lines 47-51)

- 14. Regarding independent claim 14, Shambroom discloses a system for reliably executing a transaction at a destination site requested by a source site, the system comprising: (col 2, lines 6-11) and (Abstract, lines 1-3), transmitting an initial transaction request message to destination site from source site; (abstract, lines 3-5), executing a transaction associated with initial transaction request message at destination site; (col 4, lines 13-17), a reservation database at destination site for storing information uniquely identifying and for storing information tracking the progress of data operative transaction (col 4, lines 2-9).
- 15. Regarding claim 15, Shambroom discloses a system, wherein the reservation database is a content addressable memory (col 8, lines 46-50) and (col 11, lines 1-7).
- 16. Regarding claim 16, Shambroom discloses a system, wherein the source site comprises: a processor (col 3, lines 47-51) and the destination site comprises: a memory (col 8, line 51).
- 17. Regarding claim 17, Shambroom discloses a system, wherein the source site comprises: a processor agent device for conducting communication with destination site, thereby enabling processor to efficiently concentrate on other tasks (col 3, lines 47-51).
- 18. Regarding claim 18, Shambroom discloses a system, wherein the source site comprises: a source site database for preserving identification and a status of transaction until transaction is complete (col 8, lines 27-31).
- 19. Regarding claim 19, Shambroom discloses a system, wherein the processor agent device comprises: a timer for initiating a retransmission of

Art Unit: 2143

transaction request message if no message responsive to initial transaction request message is received at processor agent device upon expiration of a retransmission time-out period (col 9, lines 18-35).

- 20. Regarding independent claim 20, Shambroom discloses a system for executing a transaction in a network having a source site and destination site, the system comprising: (abstract, lines 1-3) transmitting an initial transaction request message from source site to destination site; (Abstract 3-5) receiving transaction request: message at destination site; (Abstract, lines 3-5) for establishing a plurality of data entries related to the progress of data operative transaction in a destination database; (abstract, lines 13-15) and preserving data entries with transaction in destination database so long as data operative transaction is active in network (col 9, lines 46-54) and (col 4, lines 2-9).
- 21. Regarding claim 21, transactions of a memory read and write. (corresponds to the network server needs to act as if it has the identity and memory of the client server.(col 4, lines 2-4)
- 22. Claim 22 and 23 recite the same limitation as claim 21. Therefore, they are rejected by the same rationale.
- 23. Regarding claim 24, a method for executing a memory device control transaction in a network having a source site and a destination site, the method comprising the steps of:

-transmitting an initial transaction request message from source to destination site; (corresponds to integrity and security of messages transmitted from a client to a network server and then to a destination server or from the destination server to a network server and then to the client as part of a distributed computer system. (abstract)

-receiving transaction request message at destination site; (corresponds to establishing a secure connection for receiving data from a client, col18, part [e])

Art Unit: 2143

-a plurality of data entries related to the progress of memory device control transaction in a destination database; (corresponds to obtaining data from a destination server, abstract, lines 13-15)

-Preserving association of data entry with memory device control transaction in destination database so long as transaction is active in network (corresponds to the shell program creating records on the network server that maintain a record of the user's identity and use (i.e. time and date). As long as the user is logged on, the shell logon program exists. (The shell program creates records on the network server that maintain a record of the user's identity and use (i.e. time and date). As long as the user is logged on, the shell logon program exists. Col 4, lines 6-9)

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mitra Kianersi whose telephone number is (703) 305-4650. The examiner can normally be reached on 7:00AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (703) 308-5221. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-9923 for regular communications and (703) 746-9923 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Mitra Kianersi June 17, 2004

SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100